DOCUMENT RESUME

ED 197 216 CE 027 900

AUTHOR Rice, Eric: And Others
TITLE Access to Vocational Education. A Planning System for Local Secondary and Post-Secondary Program and Facility Accessibility. Exemplary Programs and Practices.
INSTITUTION Barrier Free Environments, Inc., Raleigh, N.C.: System Sciences, Inc., Chapel Hill, N.C.
SPONS AGENCY Office of Vocational and Adult Education (ED), Washington, D.C.
PUB DATE [80]
CONTRACT 300-78-0592
NOTE 27p.: Photographs and green headings will not reproduce well. For related documents see CE 027 894-901.

EDRS PRICE MF01/PC02 Plus Postage.
DESCRIPTORS *Accessibility (for Disabled): *Access to Education: *Demonstration Programs: *Disabilities: Educational Planning: *Mainstreaming: Postsecondary Education: Program Descriptions: Resource Materials: Secondary Education: *Vocational Education

ABSTRACT

Focusing on vocational education programs that have accommodated the handicapped, this resource book is designed for use with a planning system for improving local secondary and postsecondary program and facilities accessibility. The first of three major sections presents brief descriptions of seven model programs, including (1) the Special Education Rehabilitation Vocational Education (SERVE) program: (2) the Related Vocational Instruction Plan, State of Georgia: (3) the Career Education Center, Denver: (4) the Liaison Counselor Model, Florida: (5) the Career Training Center, California: (6) the Lyndon B. Johnson Space Center, Houston: and (7) the Illinois Network of Exemplary Occupational Education Programs. The second major portion describes exemplary practices which were judged to be a good solution to a frequently occurring problem in schools serving the handicapped. The final section outlines the efforts of three states (Arizona, Indiana, and Tennessee) to promote placement of handicapped students in vocational education. (LRA)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

Access to Vocational Education

A Planning System for Local Secondary and Post-Secondary Program and Facility Accessibility

ED197216

Exemplary Programs and Practices

U S DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

3

Exemplary Programs and Practices

Model Programs, 5
Exemplary Practices, 17
Statewide Programs, 23

Introduction

"The way I see it, life is essentially a bowl of pits for handicapped kids; you know someone else ate the cherries."

. . . Chuck Wrobel
SERVE Center Manager
White Bear Lake, Minnesota

Efforts to integrate handicapped students into regular vocational programs have begun in many places with varying degrees of success. The programs which are presently in operation have been shaped by many factors—who or which group initiated the program, the sources of funding, options in local facilities, size and composition of the handicapped group. Because vocational programs which accommodate the handicapped have developed differently to suit local purposes, comparisons of programs and evaluation of all programs in terms of common criteria are almost impossible. In the following descriptions and discussions of "exemplary" programs, please keep firmly in mind that these programs have not been judged "the best" but were chosen to represent a range of problems and solutions from among those on which published reports are available.

Aside from model programs many local education agencies have initiated new practices to accommodate handicapped students in their vocational programs. Most often these innovations have occurred as a result of looking at existing roles, facilities and programs in a flexible way. For example, special education and vocational teachers can share responsibility for instruction and students. One advantage of these "small scale" operations over more elaborate efforts is that they require only very small expenditures for the school system. For current information about these less formal programs that may be adaptable to local needs, a good reference is the new publication, *Journal for Vocational Special Needs Education.*

A third type of innovation that can be found across the country is an effort by the states to encourage local education agencies and districts to share ideas, information, facilities and other resources in solving the problems associated with making vocational education accessible to handicapped students. Sometimes a state establishes a dissemination center, as in Illinois; another state may try to foster more personal, less formal communication channels. Several of these systems are mentioned in the concluding section of this booklet.

Model Programs

SPECIAL EDUCATION REHABILITATION VOCATIONAL EDUCATION (SERVE)

WHAT'S EXEMPLARY? The cooperation among the nine school systems which feed students into the SERVE Network is unique. The comprehensiveness of the services offered, the "partial" certification of students in skills areas, and the open admission policies of the Center are also admirable.

The *Special Education/Rehabilitation/Vocational Education (SERVE)* Center is made up of several groups of employees: Supplemental Resource Instructors (SRI's) provide tutoring, counseling and assistance with job placement; personnel at the Assessment Center where students are evaluated and allowed to explore different career choices before enrolling in an actual vocational course; Related Special Instructors who teach students math and language skills; and an administrative staff. Members of the SERVE staff work cooperatively with the Vocational Technical Institute, vocational education programs in feeder schools, job placement and other community vocational services organizations.

The Vocational Technical Institute in which SERVE is located is fairly unique, even without the SERVE program. It was established cooperatively by the nine school districts of the Minneapolis-St. Paul area to meet their need for special vocational education facilities which none of them could afford separately. All instruction is individual; there are no admission requirements. Of the 2800 students, about 700 are handicapped and the school has a policy of accepting 20% special needs students. Among the handicapped group are 20 trainable mentally retarded students. Courses of study are offered in 55 skill areas, and 90% to 95% of their graduates find employment upon completion of their studies.

The school offers assessment, career exploration and training, and individualized instruction. Resource room assistance is available to students with special needs. In SERVE are offered a personal adjustment program, job seeking assistance, and training in job survival skills as well as a high degree of coordination with other community agencies.

Cooperative arrangements have been established with local prison facilities and drug rehabilitation programs. Its special facilities for the deaf have earned SERVE a national reputation and clientele.

The Technical Institute is a large, modern structure which was built barrier-free. The interior walls can be rearranged to accommodate shifting needs and all the shops are well equipped with modern up-to-date machines. Handicapped students work primarily out of the Assessment Center within the Institute where they receive resource instruction and prepare to participate in regular vocational classes by learning and practicing use of the various devices they will be required to manipulate on the job. For example, operating a lathe may be a relatively simple matter for a nonhandicapped vocational student; it is a task which a handicapped student can master if is broken down and learned in small steps and steps put together in proper sequence.

The unique features of the Vocational Institute make it an ideal place for handicapped students to be mainstreamed into vocational education. First of all, the building was constructed to be accessible. Secondly, the individual instruction system which was adopted for all students makes it very easy for teachers to work with handicapped individuals. The school has an open admissions policy and will allow students to try several different vocational areas in the Assessment Center or even several of the vocational programs before they settle on one in which to be certified.

The SERVE program also issues a certificate to "partials"—students who can master some parts of a program but not all of what is required to receive a regular certificate. For example, students who can change oil, balance tires and repair mufflers but cannot read well enough to make more complicated repairs can receive a certificate that recognizes their skills but does not say they are qualified to be an automechanic. The student then has a better chance of locating a job than if they had no recognition at all. Numerous other vocational education programs do not issue "partial" certificates, to the detriment of their program and their students, both handicapped and nonhandicapped.

What has the experience of handicapped students been in the SERVE program? The dropout rate for handicapped individuals is approximately one-third of that of other students. Their absenteeism on the job is much lower and some even refuse a vacation for fear of losing their job. Employers have reported high satisfaction with handicapped employees and have requested more job applicants.

Contact:
Jerry Bauer, SERVE Coordinator
916 Area Vocational Technical Institute
3300 Century Avenue North
White Bear Lake, Minnesota 55110
Phone—612/770-2351

THE RELATED VOCATIONAL INSTRUCTION PLAN (RVIP), STATE OF GEORGIA

WHAT'S EXEMPLARY? The Georgia RVI program is to be commended for the speed with which it was adopted and spread throughout the State due chiefly to the efforts of the state director. Related Vocational Instructors are like special new teachers found elsewhere but their role has been most clearly defined and the most careful and systematic training offered to them here in Georgia.

After only a very few years of operation, the Related Vocational Instruction program is functional in 150 vocational programs located in urban, suburban and rural secondary school and area vocational schools in the State of Georgia. The program was essentially conceived and initiated by one energetic individual who continues to serve as state coordinator and monitors the program. The program is funded primarily by the

State of Georgia with some matching Federal funds. All types of handicaps are represented among the special students served, and trainable mentally retarded from a sheltered workshop are accommodated at one school.

The major overall goal of the RVIP program is to offer training in the same job skills to handicapped students as are offered to nonhandicapped students through the vocational program. From the student's point of view the program is organized around an IEP meeting, mainstreaming into regular vocational courses and assignment to a resource room for supplementary instruction. The goals are accomplished in terms of staffing through interdisciplinary cooperation between vocational and special education by means of a very special instructor.

The Related Vocational Instructor (RVI) is the key to the whole program as it is operated in Georgia. Working out of a resource room, the RVI makes initial assessments, provides related academic instruction, tutors students in vocational areas, and counsels students. The other 50% of his or her time is spent outside the resource room, helping vocational teachers modify programs or instruction to fit the needs of individual handicapped students, serving on the IEP committee and in other ways facilitating communication among the staff working with handicapped students. When the student finishes, the RVI helps the student find a job with the assistance of the state vocational rehabilitation services. A major part of the RVI job is task analysis of vocational skills into component skills in order to identify what supplementary instruction handicapped students might need.

Where do Related Vocational Instructors come from and how are they trained? All of them have teaching certificates in special education and have received special in-service training, for which they receive graduate credit, which enables them to work with vocational educators. The in-service program is a full-time, six-week course taught in the summer by the state coordinator who developed the RVI role. During the course, would-be RVI's learn to teach practical tasks relevant to vocational education, such as how to punch a time clock and fill out income tax forms. In addition, new RVI's learn task analysis which they use to decide on instructional methods and materials for handicapped students. They also use task analysis to advise vocational instructors about how to teach handicapped students.

The success of the program is indicated by the rapidity with which it has been accepted and adopted across the State of Georgia. Though not every vocational instructor is required to participate in the program, more and more instructors in more and more schools are. Vocational teachers report that the techniques they learn or develop as a result of working with handicapped students frequently prove to be helpful in working with nonhandicapped students. They are also discovering that many handicapped students differ little from nonhandicapped and that often the reason for which the student was placed in special education, such as a low reading score, in no way interferes with their performance of vocational skills and tasks.

Contact:
Douglas H. Gill, Project Coordinator
Vocational Programs for the Handicapped
Southern Georgia College
Statesboro, Georgia 30458
Phone—912/681-5449

THE CAREER EDUCATION CENTER, DENVER, COLORADO

WHAT'S EXEMPLARY? This program represents an attempt to adapt a career exploratio' component which serves all vocational students for use by handicapped and disadvantaged students. This kind of program is particularly important to students with special needs because many of them have very unrealistic occupational goals and at the Center they may explore several different vocational options before choosing one in which to be trained.

The Career Education Center resembles the Minnesota SERVE program in several ways. A more recently developed program, the Denver Center provides career exploration experiences for the vocational programs of all city high schools for all students who many need such services. The curriculum includes courses in media, drama, art, music and dance as well. Of the 1200 students who are referred there each year, about 60 are identified as having various handicaps and another 25 are academically disadvantaged.

Handicapped individuals most often reach the Career Education Center upon the recommendation of their IEP committee. Once there, they choose a vocational area based on personal interests with the assistance of career counselors and begin exploratory studies. Their progress is carefully monitored initially by the CEC staff to insure that the most appropriate courses have been selected; modifications, if needed, are initiated early in the program. Job placement is done cooperatively by the lead teacher, with the support of the special education and vocational education staff, and the vocational rehabilitation counselor.

The Support Services Program located at the Career Education Center is available to all students and is used by students with all sorts of disabilities. The staff consists of one teacher, a part-time tutor and a full-time tutor-interpreter for deaf students who advise on appropriate class placement and offer vocation-related language and math instruction. Other services provided by the teacher include material and equipment modification, coordination with the special education teachers at the home school and personal counseling. The Support Services are housed in a complex of rooms at the Center which has individual and group study areas, a lounge, a teachers' work area, and room for resource materials and equipment. Vocational teachers work with the Support Services teacher to develop learning modules—break down the task into the skills necessary to perform the whole function so the skills can be developed separately and then reintegrated into the performance required to demonstrate competency in a particular vocational area.

The basic philosophy of those in charge of the Denver program is that the teachers should try to handle problems as best they can without outside assistance. This commitment means that mainstreaming handicapped students into the program has cost the Denver Public Schools very little. The administrator who formulated the program decided that going outside the school system to procure "help" and funds was not worth the effort to meet guidelines or specifications that might not fit the students or local setting. Instead, the administrator reassigned a teacher who had dual certification in special education and a vocational specialty to head the program and coordinate services. Individual teachers work with students as best they can, calling on the in-school Service Center when needed. Though tutoring could have been supplied by volunteers from the community, the half-time tutor's and the deaf interpreters' salaries are paid with funds coming from outside the school, however.

The teacher who runs the Support Services program indicated that many of the students served have not been properly identified as being handicapped. Many learning disabled and emotionally disturbed children come to the center as nonhandicapped only to be referred when they begin having difficulties in the classroom. The teacher points out that reticence on the part of the home high school teachers to identify correctly students with handicaps exposes them to another failure

experience and delays their receiving needed educational services. Presently, the staff is developing a pupil profile to provide the vocational instructor with needed information about students' strengths and weaknesses.

In summing up the feelings of the staff after the first year of the program, the principal of the school acknowledged that he and his whole staff were initially apprehensive about having handicapped students because they did not know what to expect and feared the unknown. He also had felt that the staff should try to solve any problems generated by mainstreaming handicapped students into their program before seeking outside assistance. In the course of doing so, vocational teachers have found that handicapped students are very much like nonhandicapped students. Some need chiefly encouragement and occasional academic assistance from the Support Services teacher. Other handicapped students progress more slowly than nonhandicapped students, and the more severely handicapped require additional assistance, they found. Nonhandicapped students frequently assist the newly mainstreamed individuals spontaneously which also aids their accommodation. The teachers noted that the enthusiasm and eagerness of handicapped students more than make up for their deficiencies, many of which proved to be slight in the vocational courses.

Contact:
Irv Maskowitz, Principal
Career Education Center
2650 Eliot Street
Denver, Colorado 80211
Phone: 303/455-5966.

THE LIAISON COUNSELOR MODEL, PALM BEACH COUNTY, FLORIDA

WHAT'S EXEMPLARY? The amount of advance planning, the establishment of long-range goals, and the beginning of working relationships with other community agencies, all of which the Liaison Counselor accomplished during the first two years, make the Palm Beach program unusual. Recognizing the importance of working relationships with teachers as being necessary at the outset of the program and working to win them over are other admirable features of this program.

When the implications of P.L. 94-142 and previous legislation became apparent to adminstrators in the Palm Beach County, Florida, schools they realized they had no program or even a plan for making vocational education accessible to handicapped students. In 1976 they hired a quadraplegic to draw up a master plan to bring handicapped students into the vocational education mainstream. By working with teachers and administrators in all three areas—vocational education, special education and vocational rehabilitation—and by strongly advocating the necessity for these programs within the school system, she mapped out a system whereby eventually almost all handicapped students who desire it are being mainstreamed into vocational courses.

Palm Beach County encompasses a large geographic area along the southeastern coast of Florida. The population is quite diverse, ranging from migrant agricultural workers to very wealthy retirees along the popular coast. Vocational education programs are concentrated in two regional technical high schools, although 30 vocational programs are scattered among the other 88 schools of the county. In addition, trainable mentally retarded students from a program sponsored by Florida Atlantic University are involved in the Palm Beach County vocational program. The geographic and cultural diversity of the region further complicates educational efforts of almost any kind and proves a challenge to even the most enthusiastic program innovator.

The new "Liaison Counselor," as she was called, began her work by conducting an extensive needs assessment by personally interviewing

handicapped individuals to document the problems encountered by handicapped individuals in finding and keeping jobs. She also carried out a series of workshops among vocational education and special education teachers, guidance and rehabilitation counselors and parents to make clear to these groups what expanding vocational education and related services to include the handicapped would mean.

Since the Liaison Counselor was hired in 1976 she has worked intensively with one of the area vocational high schools and with the Florida Atlanta University program. Already schools have begun assigning teachers trained in workshops run by the Liaison Counselor to coordinate vocational and special education and are hiring additional support staff. Since the program began, the number of handicapped students referred to the area vocational high schools has increased significantly.

The very special person hired as Liaison Counselor in Palm Beach County had a varied background of experiences on which to draw in creating the program—as a teacher, rehabilitation specialist and career counselor—in addition to first-hand experience of the problems of being handicapped. Familiarity with all these areas enabled her to plan the program realistically and in stages; having held these different jobs gave her credibility with persons with whom she needed to work.

Some of the many problems initially encountered were over-crowding in the present facilities, different decision-making policies among schools, and policies requiring students to try programs in their own schools before going to the technical high schools which essentially made the technical school unaccessible to handicapped students. Vocational education teachers and special education teachers, it turned out, knew very little about what the other did and even less about how handicapped children might fare in vocational programs. So one of the first steps was to bring the two teacher groups together to share information. Another job of the liaison person was to locate and secure outside-the-system funding for additional positions in the program.

For handicapped students, special education teachers and vocational teachers this Liaison Counselor is trying to focus attention on what behaviors are required in the job situation rather than on what the student's IQ score or reading level is. The Occupational Specialist at each high school is responsible for pre-vocational programs which educate students about the demands of a job situation. The Liaison Counselor is working with the occupational specialists to include handicapped students in these pre-vocational programs and to organize field trips to job sites where handicapped persons are employed.

Unlike several other programs mentioned in this booklet, the Palm Beach program does not as yet have any assessment information compiled and available on each child Without any information about their skills except perhaps a reading level and some general statement of interests, it is very difficult to place a student in the best vocational training. The Liaison Counselor has attempted to fill this information gap by interviewing, at least briefly, every handicapped student who enrolls in vocational education. Eventually she will set up an on-the-job skill and interest and aptitude assessment procedure, because it is important students be placed in the most appropriate programs for them, not be bunched up in a few programs which have low reading requirements as they presently are.

The Liaison Counselor works with teachers as well as students. She holds workshops on a variety of topics, from attitudes toward handicapped people to legislation affecting handicapped to how to teach children with different types of handicaps. She develops and provides special learning materials for vocational teachers to use in teaching special needs students. She also acts as liaison between special education and vocational teachers who work with the same student. Another role she assumes is providing information about jobs available in the community for handicapped students.

Contact:
Donna M. Batelaan, Liaison Counselor
Palm Beach County School Administrative Offices
3323 Belvedere Road
West Palm Beach, Florida 33402
Phone: 305/683-0040, Ext. 268

CAREER TRAINING CENTER, BAKERSFIELD, CALIFORNIA

WHAT'S EXEMPLARY? The Bakersfield program differs from other programs in that handicapped students are completely segregated from nonhandicapped students in order to more efficiently prepare them for work placement. In addition, educable mentally retarded students study one curriculum and students with all other types of disability study another. Though mainstreaming in this program is limited, it is mentioned in this section for one reason—it works!

Unlike some of the other programs described in this booklet, the Career Training Center (CTC) in Bakersfield, California, is a completely segregated program in which only handicapped students are enrolled. Also unlike some other programs mentioned here, the Bakersfield vocational offerings stress job skills specific to the local job market rather than broader or more widely popular options, assuming that most handicapped students will stay close to their original homes. However, the program has wide support within the community and students' enthusiasm for their work is high. What better endorsements could a program receive?

The Career Training Center (CTC) is especially for handicapped students whose high schools are distant from towns and potential job placement sites; many of the schools do not provide vocational programs at all. The CTC is only one of several services for special needs students—some services are available at the home high schools. Altogether, nine high schools refer 160 juniors and seniors to the CTC facility for half of each school day through the usual IEP committee structure.

The CTC day is divided into morning and afternoon sessions. During the mornings educable and trainable mentally retarded students are taught particular vocational skills in courses based on jobs actually available in the community. The classrooms have been constructed to look like real job settings as much as possible. Once their skills are developed, students from the morning program receive 30 hours of on-the-job training which leads to an employer certification in that vocational area. Students may be certified in several different areas before they graduate. Besides vocational training, mentally retarded students are taught independent living skills in a completely equipped house trailer.

Sensory, physical, emotional and other educational handicaps affect students who attend the CTC during the afternoon. Most of these students have more skills and abilities than the morning students so their program is called "paravocational"; personal appearance, getting along with others, attitudes, values and work habits, and physical fitness are stressed in the afternoon curriculum. After usually one semester, these students are placed on the job in local industry in the town of Bakersfield. Additional vocational training is then provided to them by the Regional Occupational Center or a local college.

Services offered at the CTC are very similar to the ones offered in the regular high school vocational and special education programs but the ones at CTC are more comprehensive and integrated to meet the needs of handicapped students. More counseling, remedial math and reading are offered. The Center also coordinates the services of agencies outside the school system such as vocational rehabilitation. It provides in-service programs to regular teachers, offers comprehensive counseling and does family education. The Center is also responsible for transporting handicapped students to its campus separate from the regular school bus transportation schedule.

The Bakersfield program was developed without the aid of any outside consultants. Seven staff members, aware of the pending legal requirements for providing vocational education for handicapped students, developed a list of problems that had to be solved. Then the group divided into committees to deal with clusters of problems such as transportation and staff training. After two years of planning, the program was ready to go. Some aspects of it still are waiting for funds or for staff and site requirements to be met.

This particular program grew out of a recognition that the "work experience" program the school

system had had for handicapped students just was not sufficient, that it was not developing the skills that students needed to remain employed after they finished training. The program developers felt a very strong need to place students on actual jobs, knowing that skills would be mastered and retained longer under those circumstances and that valuable habits and social skills would be developed that could never be duplicated in a classroom. The fastest way for handicapped students to be trained to go out on the job site was to prepare them in a separate facility, even though this approach segregated them from regular students.

Educators in Bakersfield have found that employers are eager to help train and then hire handicapped students. They attribute this willingness to genuine concern for those with special needs. In fact, there are more job slots in Bakersfield than the placement counselor can fill from the available pool of handicapped students. Many of the jobs are with state and local government (civil service positions) but just as many more are with the private business sector.

The afternoon program curriculum was based on the recognition that handicapped, non-retarded students needed a different curriculum from retarded students. Afternoon students did not need remedial reading and math training or practice in trade skills. They *did* need to develop self-confidence, good work habits, interpersonal poise, and other social skills, so these paravocational subjects receive more attention in the afternoon curriculum. The course offerings in the afternoon include a charm school and a course in disco dancing. Good work habits and appropriate social skills are particularly appreciated by employers of handicapped students and often make them more employable than nonhandicapped students from a conventional vocational program, administrators in Bakersfield report.

Contact:
Dr. Jack Schuetz, Director of Special Education
Kern High School District
2000 24th Street
Bakersfield, California 93301
Phone: 805/327-2752

LYNDON B. JOHNSON SPACE CENTER, HOUSTON, TEXAS

WHAT'S EXEMPLARY? The Space Center program described here is different because it represents the efforts of an industry, the space industry, to reach out into the schools and help handicapped individuals get on-the-job training. Because the program came from outside rather than from within the school system it offers training in areas where handicapped people have never been trained before.

The Equal Opportunity Program of NASA at the Lyndon B. Johnson Space Center in Houston, Texas, is an example of an industry (although it is government-sponsored) which has taken the initiative in recruiting handicapped high school students to work there. Many job situations require skills that public schools cannot realistically be expected to teach because the skills are so specific or technical. This was the case in Texas. The program has proven successful for both the students involved and for the Space Center.

Students are recruited from the Houston Independent School District's vocational education programs for handicapped students, among other locations. They are given non-paid work experience during an extended observation period that can lead to a regular position at the Space Center. Even if a job for them does not open up, they at least have some real work experience to help them compete for jobs from other

employers. Having some actual work experience is often the most important requisite for being considered for employment, and many of the skills in which students receive training at the Center are highly salable.

In 1976 NASA made good its commitment to state and local programs to aid handicapped people in getting work experience by hiring a person to develop an Equal Opportunity Program; the person hired happened to be handicapped herself. Though handicapped individuals come to the Center through several routes, those recruited from the high schools are either seniors in cooperative education programs who get credit for part-time work at the Space Center during the school year or juniors and seniors who come there during the summer for training. Though trained at entry level jobs, many of the students return to work after attending college or receiving other training that qualifies them for more advanced positions.

As a handicapped person, the Equal Opportunity Specialist in Houston felt that the hardest but most important aspect of getting and keeping a permanent job for a handicapped individual was to overcome their dependence on other people (primarily parents and special education teachers) for help with tasks they can actually perform for themselves. Though probably once necessary and heavily supported by cultural myth and expectation, this habit of dependency is a damaging one in job settings, she feels. The Specialist says,

> "Mainstreaming is probably a good idea but cannot be expected to work if students are jerked out of special education programs in which their dependency was reinforced and dumped directly in job situations where such assistance is not available—it's just too much to ask."

When the Equal Opportunity Specialist first approached the Houston Independent School District to recruit students she discovered handicapped students enrolled in the food services, home economics and horticultural programs but not in clerical fields. She learned that vocational office education was located at a regular school in the system and was therefore unavailable to handicapped students. Since NASA needed clerical help, she decided to place some handicapped students on the job in the clerical areas. The Specialist hired by the Space Center visits each of the public schools to tell handicapped students about the work experience available at the Center, but she leaves it up to the individual student to take the initiative in arranging the interview at the Center for the job. Another function that the Specialist assumes is to make handicapped students, once they are employed at the Center, aware of the possibilities for job advancement at the Center for which they might apply. She also tries to match trainees with supervisors with whom she believes they can work easily and well.

The response of management at the Space Center to the work experience program for handicapped high school students has been quite positive. Most of them have been placed in the supply and clerical departments where they have proven to be both dedicated and highly productive compared with nonhandicapped personnel. Safety regulations have been carefully observed especially in areas where real hazards exist. Considering that these students had no previous knowledge or work experience they appeared to have learned rapidly and well, according to their supervisors.

Contact:
Shirley Price, Equal Opportunity Specialist
NASA, Lyndon B. Johnson Space Center
Equal Opportunity Program Office
Houston, Texas 77058

ILLINOIS NETWORK OF EXEMPLARY OCCUPATIONAL EDUCATION PROGRAMS

WHAT'S EXEMPLARY? The integration of different levels of school administration—Federal, state and local—makes the Illinois model remarkable. Also, the idea of setting up exemplary programs in different geographic areas to demonstrate how handicapped students may be integrated into vocational education is a novel but practical solution to the problem of dissemination.

Some of the most imaginative and comprehensive arrangements for making vocational education accessible to handicapped students involve cooperative efforts of several school systems or arrangements among several different "levels" of school administration—Federal, state and local. Though they require rather more planning and considerable coordination, more students can be offered more vocational options at somewhat less cost when resources are pooled and responsibilities shared. Of course, these large scale programs do not spring from meeting pressing, immediate needs and require long-range thinking and planning over several years.

To begin serving handicapped students in vocational programs, the State of Illinois developed eight demonstration programs around the State over a three-year period. At each site they conducted a needs assessment the first year, developed activities to meet the needs the second year and began demonstration and diffusion to neighboring localities the third year. Work with local school districts to improve vocational programs was arranged via service agreements between the demonstration sites and local educational agencies and usually involved workshops.

At Illinois State University a center for diffusion and dissemination was set up to collect and exchange information on the state level; materials, a newsletter, consultation, and workshops are also available to school districts from the center. On the state government level, a management team appointed by the vocational education director established policy for the technical advisory group of special needs consultants who operate out of state government. Four university "externs" also are available annually as resources to local school systems.

The Illinois system has been in operation a number of years and the major need they have identified in the State is preparation of both vocational and special education teachers for working together and making vocational programs accessible to handicapped students. The in-service program they have developed begins with a personal needs assessment by teachers and then a nominal group procedure to determine the relative importance of different needs. Then teachers develop their own IEP's based on their own professional goals which they rank order; the teacher and administrator together decide which ones the teacher will work on. The in-service also includes analysis of program content needs, identification of internal and external resources, and establishment of an incentive system. Each teacher further develops a "Plan for Action" which summarizes all of his or her needs, goals, objectives, strategies, resources, and anticipated outcomes. The entire in-service program takes several weeks or months but has been judged in Illinois to be far more effective than any number of "one-shot" workshops with low teacher involvement.

Contact:
Cookie Batsche
202C Turner Hall
Illinois State University
Normal, Illinois 61761
Phone: 309/436-6022

Exemplary Practices

INTRODUCTION

In addition to programs which are comprehensive enough to serve as models for other educational units, many programs demonstrate exemplary practices, single ideas which are worth noting for practitioners who might be interested in them. Each of the practices mentioned below was judged to be a good solution to a frequently occurring problem and therefore a solution which might easily be adopted in another setting. All of the practices to be described have been used for a number of years and, in some cases, in a number of schools. Most of the exemplary practices represent local solutions to unique local problems—they have not been made by outside experts, directed by Federal mandates or borrowed from neighboring school districts.

SERVICES PROVIDED

The **Miami-Dade Community College** in Florida with four separate campuses is the largest community college in the United States. Its vocational offerings are as many and as diverse as its academic courses. The non-essential aspects of the curriculum are equally varied—music, art, dance, drama plus a full range of athletic skills. The college is so large and spread out that it can be quite overwhelming to handicapped students in the area who are potential students. Those at the college who work with handicapped students find their job challenging.

The staff at Miami-Dade receives its directions from the goals and objectives established for them by a broad-based campus advisory committee made up of representatives of all aspects of campus life, including handicapped staff and handicapped students. The staff coordinator has a forceful personality and is also a skillful organizer; the coordinator spends much time working on public relations with the community organizations who help train

handicapped individuals. Miami-Dade also has a coordinator for physically limited students who works closely with vocational rehabilitation to provide auxiliary services for this group of handicapped students. In addition, handicapped faculty has been hired at Miami-Dade and most have some free hours during the day during which they are available to counsel students with handicaps like their own.

One effort of which the coordinators are particularly proud is the three courses in sign language which they were instrumental in establishing; now student assistants for the deaf are trained right on campus. The special needs staff is also responsible for ongoing efforts to sensitize different groups on campus to the problems that disabled students have. In addition to traditional awareness sessions they have made a film, "With a Little Help From Our Friends," which is shown to all instructors and many of the non-handicapped students on campus.

Financing programs for the handicapped is becoming as difficult at Miami-Dade as at other educational institutions; demands are up and resources are down. Trying to procure money occupies a large part of the special needs administrator's time. The Miami-Dade staff has found it much easier to get money for *things* than to get it for *people*—for deaf interpreters for example. Though educators may have to "scrounge" to fund programs they think important, in the long run it is worth it, the Miami-Dade special services staff has decided.

Santa Anna College in California, serving a semi-urban area which is ethnically diverse, has programs for three handicapping conditions—communication disorders, learning disabilities, and physical disabilities. The special needs staff is headed by an "enabler-specialist" who coordinates services at the college for handicapped students. Working individually with students the enabler tries to assess their aptitudes and interests and guide them into areas which fit their profiles. The enabler specialist has reported that many handicapped students have very unrealistic occupational goals, that sometimes they must try and fail at a particular job in order to adjust their objectives and become more realistic.

At Santa Anna the staff conducts an awareness program to sensitize the whole campus to the feelings of handicapped students. Each year they have an Awareness Day on which trustees and administrators conduct their activities from wheelchairs. From the very beginning of mainstreaming efforts at Santa Anna student support of the program has been evident chiefly through the student newspaper.

The curriculum at Santa Anna College has been adapted to the needs of handicapped students. The reading program is available to all special needs students, even the deaf with the aid of speech instructors. The career education center has special information for handicapped students and the college offers many introductory courses for students to try. Adaptive physical education for the disabled students, mostly involving work with weights and aquatic exercises, is also available.

Santa Anna College offers work experience to all students while they are still enrolled as students through a cooperative education program. Students work 10-12 hours per week in private industries. Students and employers formulate joint goals and experience objectives which are reviewed by the students' counselor at the college or by the enabler-specialist in the case of handicapped students. Students receive academic credit rather than pay for the work experience.

Job placement of handicapped students at Santa Anna was initially and continues to be a problem, not because there are no jobs but because the students themselves are hesitant to go out into the "real world" of work. The job placement counselor has to work to secure the confidence of every handicapped student he wants to place. He has found that part-time jobs first on and then off campus for which the students earn first academic credit and then money are good transition methods to ease disabled students into the job situation. He also holds special career days and conducts workshops about job interviews for handicapped students particularly.

The funding of programs for handicapped persons has become increasingly difficult in California because of the passage of Proposition 13. It costs the college 50% more to educate a handicapped student than it does to educate a nonhandicapped

student, so the college has to demonstrate effectively that unemployed handicapped individuals cost the State more than educated and employed handicapped individuals. One method they have adopted at Santa Anna is to fund programs in gradual increments, to move into them slowly, rather than move into them wholesale in one year.

Unique in terms of size and degree of specialization is the **Placement and Referral Center for Handicapped Students** operated by the Division of Special Education and Pupil Personnel Services of the Board of Education of the City of New York. The Center functions as an advocacy organization both in the school system and in the business community when it recruits students and places them in work situations. Begun in 1971, the Center serves approximately 2000 secondary and postsecondary individuals a year; their clients have physical, emotional and mental disabilities which range from mild to severe.

The functions of the Center include identification, recruitment, screening, assessment, job placement and followup of handicapped persons who are eligible as residents of the City of New York. The program is publicized by staff members who visit special education classrooms in every high school each year. Postsecondary persons are referred from other agencies of the school system, from other educational agencies such as hospitals and private schools and from other government offices such as vocational rehabilitation.

Students are placed by the Center almost entirely in private industries through an arrangement with the "Fortune 500" companies, local industries requiring many white collar workers. The Center assists businesses in making plans for affirmative action and supplies them with employees. The Center offers stipend programs, work-study arrangements and a summer youth employment program which attracts mostly high school juniors and seniors. All job placements are located in the City of New York itself.

Twenty licensed teachers and teaching assistants are on the Center staff. Every handicapping condition is represented by at least one staff member who works primarily with students with the disability with which they are most familiar. Obviously, some staff must work with disabilities other than the one in which they were trained in order to balance out the work load.

The Placement and Referral Center is located at the central headquarters complex of the school system because it is centrally located and accessible by most every means of transportation. Unlike the rest of the New York school system, the Center is operated 9 to 5 all year round; in fact, summer is their busiest season because of the summer program and the need to do assessments and screening during the summer months in preparation for the fall.

Essex-BARC Joint Horticultural Program: In Baltimore, the Association for Retarded Citizens approached Essex Community College with the idea of setting up a training center for preparing educable mentally retarded people for employment in horticultural occupations. The program would furnish the Essex College with a training site for developing clinical skills in working with handicapped students among mental health associate students. Additional funding was forthcoming from the State of Maryland to erect a building on land owned by the college.

Program offerings include plant care, greenhouse operations, floral arranging and landscape maintenance. Concurrently, trainable mentally retarded persons maintained at an activity center on the same premises can use the horticultural program for training purposes. Students from the community simply choose this program option at their high school and arrange their transportation to the school. After four years of operation, the program's biggest need is more students!

Project Price, University of Missouri: This arrangement represents cooperation among the university, state government and educational television network. In-service training of vocational teachers to serve handicapped students is accomplished by means of an interactive television coloquium series on career education for handicapped adolescents. Accompanying materials and technical assistance are provided by the university staff to local school systems.

Employment Orientation Program (EOP), Slickerville, New Jersey: Here educators have worked out a plan for using the existing, segregated training facilities designed for special needs students exclusively to train students in basic skill areas and then move them gradually into an integrated work environment where they interact with regular vocational students and employers. Faced like so many northeastern states with good but completely segregated cluster shops for training purposes, this school district has managed to arrange a program which utilizes its excellent facilities for training and yet makes an easy transition to a very normal job placement.

At **Springfield Technical Community College** in Springfield, Massachusetts, the Services for Students with Special Needs works with 100 handicapped students. The teaching staff find they do as much remedial work with students as they do regular college teaching. In solving the problems presented by mainstreaming, the staff have found that good ideas are more important than money in solving the problems encountered. They have additionally found that the modifications in physical facilities have benefited regular students too—anyone carrying heavy books, students transporting small children, pregnant women and old people.

The **Florida Junior College** at Jacksonville has a particularly effective special needs staff. The organization is headed by a coordinator who is an eloquent proponent of education for the handicapped students at Florida Junior and directs all public relations efforts in the community. Other staff members offer continued practical guidance to teachers working with handicapped students. The coordinator also trains faculty members to work with handicapped students to make the necessary adjustments in curriculum and equipment. Overall, the special needs staff tries to get instructors to be flexible in working with handicapped students, to allow some handicapped students to train partially in a skill if they cannot be totally certified in that area. Another staff member, the job developer, places students on the jobs he has located for them in the community; he also coaches handicapped students for job interviews.

Project Liaison, Pittsburgh, Pennsylvania: A special teacher called a Learning Counselor has assisted educable mentally retarded students in making the transition into vocational education. The role was developed over a ten-year period in working with children with learning problems in the academic track. The approach has now proven successful in mainstreaming handicapped into vocational education.

The Learning Counselor meets regularly with a small group of students enrolled in the same course several times a week during their free periods. She teaches the students a systematic learning method to apply to the particular course materials. She frequently models the behaviors she wants adopted and reinforces appropriate behavior among students. She also goes into the classroom and demonstrate. the behaviors she desires such as hand raising, speaking in compiete sentences, sitting with feet under the table. The Learning Counselor demonstrates appropriate behavior to the student rather than instructing the teacher how to work with the student. Teacher and counselor ratings of increases in appropriate in-class behaviors have been reported to be highly correlated.

Life Skills Program, St. Maries, Idaho: Here educators began a pre-vocational program for all kinds of handicapped students. The first step in this program is a home visit to get written permission for a full evaluation of the student; teachers have found home visits to be (1) invaluable in establishing rapport with the parents—gaining their cooperation and support and (2) an important index of how well the students can adjust and succeed in vocational programs.

The pre-vocational program basically involves math and reading skills, living skills, and appropriate classroom behavior skills. When this phase is complete, the student may move on to developing a work skill in a cooperative vocational program in 1-3 hours of on-the-job training added to the academic program daily. Part of the directly behavioral component continues—students are taught how to please employers through continuous individual counseling.

Calhoun Area Vocational Center, Battle Creek, Michigan: This area center which serves several feeder high schools has successfully mainstreamed educable mentally retarded youths into several of its 12 vocational programs. The staff found it satisfactory the first year to place all the handicapped students in just one of the programs, basic instruction, to maintain an equal number of regular and handicapped students in a classroom, rather than to spread them out in several programs. Having their friends around enabled handicapped students to feel more at ease and self-confident. Basic instructional teachers were able to evaluate more accurately modifications of the curriculum since they had a *group* of special students and could therefore better generalize about the problems most EMR students would have. Getting support from the special education teacher was also simpler and more effective since all the students were in one program. Other programs will be added in succeeding years.

Gavilan Community College in Gilroy, California, is a small, compact facility which serves three small agricultural towns in the southern end of Santa Clara County. Because it was constructed quite recently, all of its classroom and other facilities are completely accessible. The school has been mainstreaming handicapped students for over five years.

The Gavilan program for handicapped students is consistent with their overall educational philosophy. The administration has expressed the main goal of a community college as being the production of wage earners. Consistent with this position is the view that it is better for a handicapped person to be employed than unemployed and that in a mainstreamed environment disabled students have "normal models" to emulate, from whom to learn appropriate social behavior and work habits.

The staff working with handicapped students is headed by a coordinator/"enabler" (a California term) who coordinates services both within and outside the college for handicapped students. The college also has a developmental disabilities teacher who trains her students in a "pseudo-workshop" in basic aspects of vocational functioning. Later students are placed in actual job situations with support services from this same teacher.

Gavilan finds that the most effective method for seeking funds from the California legislature is by forming coalitions with other similar educational groups and lobbying for what they need and want.

Statewide Programs

INTRODUCTION

Many state Departments of Vocational Education have launched their own efforts to promote placement of handicapped students in vocational education. There exists a broad range of services offered by the various states, costing "from virtually nothing to a great deal of money and providing both direct and indirect services. Many of the ideas, if not the —

Each of the prog ams mentioned below reflects unique responses to particular local needs using the most available resources—wholesale adoption of another state's program would probably not work.

ARIZONA

The state of Arizona has begun serving special needs students in vocational education by offering in-service training to teachers throughout the State sponsored by the state university. Workshops for teachers are focused on such topics as the legal requirements which mandate vocational education for handicapped, vocational aspects of the IEP and how they should be written, and characteristics and needs of handicapped students.

INDIANA

In Indiana are located several programs of vocational education for the handicapped. **Porter County Schools** have developed a pre-vocational program to ease the transition of students from special classes into vocational classes. Students spend half a day in academic clusters and half a day in vocational training; learning coordinators provide assistance when they are in vocational instruction. In Porter, handicapped students must meet the reading and math requirements before they can enter the vocational tract.

In **Lawrence County**, Indiana, vocational tutors work with small groups and with individuals to remediate academic deficits while the handicapped students are already enrolled in vocational programs. In **Floyd County**, Indiana, educators have made all their programs available to handicapped students including day-night programs, regular vocational classes, learning labs, and the GED program. They offer a vocational career cluster program for the ninth and tenth grade special needs students, individual and group counseling, visits, and in-service for teachers. At the community level, the Urban League, Employment Security Commission and manpower agencies assist with job placement of handicapped vocational students. Also in Indiana, **Dubois, Spencer and Perry Counties** have jointly arranged a work-study program for handicapped secondary students with each county housing different "training stations." Auxiliary counseling is offered to students, parents and teachers.

TENNESSEE

In Tennessee, the **Vocational Advancement Program (VAP)**, run in the same manner as their Vocational Improvement Program (VIP) for disadvantaged students, serves handicapped students in the following way. A maximum of five handicapped students are assigned to one vocational class at a time. The regular vocational teacher is responsible for adapting the curriculum, though the teacher is assisted by the "vocational curriculum coordinator" who writes IEP's for handicapped students, teaches the students special skills when necessary, and offers counseling and guidance. The "coordinator" is also responsible for job placement, though actual supervision of the job is handled by the placement counselor. If students prove unable to function in regular classes, basic instruction is offered in self-contained shops from which students may either again move into regular vocational programs or into sheltered workshops. To qualify for the program, all students must initially be judged as potentially employable based on a comprehensive evaluation.